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July 12, 2007

Ex Parte

Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Ms. Dortch:

On July 11, 2007, copies of the attached letters were delivered to the offices of Chairman Martin and Commissioners Adelstein, Copps, McDowell, and Tate.

Pursuant to the Commission's rules, copies of these letters are being filed electronically in the above-referenced dockets. If you have any questions or concerns, please contact the undersigned at (202) 730-1305.

Yours truly,

Edmond J. Thomas

Senior Technology Policy Advisor

Via Hand Delivery

Chairman Kevin J. Martin Federal Communications Commission 445 12th Street, SW Room 8-B201 Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Chairman Martin:

We ask that you complete your proceeding to permit unlicensed fixed and portable use of the vacant channels in the television band known as the "TV white spaces" by October 2007 in accordance with the timeline you established in your September 2006 Public Notice. Properly regulated unlicensed use will cause no harmful interference to incumbent licensed services. Your support will promote greater broadband connectivity and foster the development of innovative new wireless devices and technologies for *all* Americans.

In cities and communities across the country, there is a substantial amount of unused spectrum in the television bands. Allocating the TV white spaces for unlicensed use will stimulate the development of innovative devices, enable more economical broadband deployment in rural and other underserved areas, and ensure the efficient utilization of unused "beach front" spectrum below 1 GHz. Because of its superb propagation characteristics, the TV white spaces can be used more effectively than any other available unlicensed spectrum to: distribute multi-media content wirelessly through homes, schools, and businesses; create wireless self-forming broadband mesh networks; and enable the cost effective deployment of broadband in rural areas by WISPs, rural phone companies, community WiFi networks, and other service providers. In addition, access to this spectrum will stimulate American industry innovation and benefit consumers in ways yet unimaginable.

Access to the TV white spaces can facilitate more affordable and ubiquitous broadband deployment, particularly in rural areas. There remains a persistent 15 percent gap between broadband penetration rates in rural America and more densely populated cities and suburbs. Indeed, roughly 10 percent of American households lack a wireline broadband provider. The Leadership Conference on Civil Rights and other groups have documented the persistent digital divide between Americans with access to advanced telecommunications services at home. The opening of unused spectrum will create

greater opportunities for rural and traditionally underserved communities to bridge the digital divide.

In adopting rules for this band, it is vitally important that the spectrum be allocated for unlicensed use which will allow any broadband service provider or any consumer to access the band in accordance with Federal Communications Commission (FCC) rules, using a device certified by the FCC. An abundance of licensed spectrum below 1 GHz has been and will be made available. Some spectrum below 1 GHz needs to be dedicated to unlicensed use to spur innovation in technologies utilizing unlicensed spectrum. Given the "Swiss cheese" nature of the band and the restrictions necessary to protect incumbent licensees, unlicensed use is more appropriate than licensed use. In addition, a licensing framework would be challenging to establish, would greatly delay use of the band, and would eliminate the most important incentives industry has to utilize this precious resource. Most significantly, a licensing regime does not offer any greater interference protection to incumbent licensees than an unlicensed regime would. Both licensed and unlicensed devices would have to transmit at lower power than a typical licensed service, deploy a reliable means of determining whether a channel is in use by an incumbent licensee, and cease operation in cases where that spectrum is or becomes occupied by a licensee with a higher authorization.

It also is important that the FCC ensure that incumbent licensees are protected from harmful interference. To ensure such protection, the FCC is conducting a series of tests to: (1) determine the sensitivity of current DTV receivers to interference and (2) evaluate whether portable devices using spectrum sensing technology and transmit power control technology can operate without causing harmful interference to licensees. The FCC also has a certification process which will evaluate devices before they can be sold to consumers to ensure that they comply with FCC regulations.

Many of the signatories to this letter have suggested that unlicensed devices be required to transmit at very, very low power and employ spectrum sensing technology that is capable of detecting analog and digital television signals and wireless microphone signals. This technology would allow unlicensed portable devices to identify vacant television channels and avoid channels being used by incumbent licensees including broadcasters and wireless microphones. On behalf of a number of high tech companies, including television manufacturers, Microsoft Corporation and Philips Electronics have submitted a total of four devices with these features to the FCC for testing to demonstrate that there will be no harmful interference to incumbent licensees.

The FCC can assist in delivering greater and more innovative broadband connectivity to consumers by allowing the unlicensed fixed and portable use of the white spaces. With the superior propagation characteristics of the TV white spaces, the next generation of advanced wireless devices easily will be able to move enormous amounts of data around homes, schools, offices and neighborhoods, and reach deep into rural areas to provide low-cost broadband service. Once the FCC has completed its testing, there will be no reason why the white spaces cannot become the home of yet another wireless broadband revolution.

We look forward to working with you to deliver greater wireless broadband connectivity and innovative devices to consumers across the nation and in rural and underserved areas.

Sincerely,

Craig Mundie

Chief Research and Strategy Officer

Munde

Microsoft Corporation

Levin Kettler
Kevin Kettler

CTO Dell

Shane Robison

Executive VP and Chief Strategy and

Technology Officer Hewlett-Packard

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Tom Patton VP, Government Relations Philips

Robert W. Holleyman, II President & CEO Business Software Alliance

Kobert Holkeman

John Palafoutas Senior Vice President American Electronics Association

Rhett Dawson President Information Technology Industry Council

cc: Erika Olsen

Via Hand Delivery

Commissioner Jonathan S. Adelstein Federal Communications Commission 445 12th Street, SW Room 8-A302 Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Commissioner Adelstein:

We ask that you complete your proceeding to permit unlicensed fixed and portable use of the vacant channels in the television band known as the "TV white spaces" by October 2007 in accordance with the timeline you established in your September 2006 Public Notice. Properly regulated unlicensed use will cause no harmful interference to incumbent licensed services. Your support will promote greater broadband connectivity and foster the development of innovative new wireless devices and technologies for *all* Americans.

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Justin Rattner Chief Technology Officer Intel

Jonathan Zuck President

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Rhett Dawson President Information Technology Industry Council

cc: Barry Ohlson

Via Hand Delivery

Commissioner Michael J. Copps Federal Communications Commission 445 12th Street, SW Room 8-B115 Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Commissioner Copps:

We ask that you complete your proceeding to permit unlicensed fixed and portable use of the vacant channels in the television band known as the "TV white spaces" by October 2007 in accordance with the timeline you established in your September 2006 Public Notice. Properly regulated unlicensed use will cause no harmful interference to incumbent licensed services. Your support will promote greater broadband connectivity and foster the development of innovative new wireless devices and technologies for *all* Americans.

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Sincerely,

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Kobert Holleman

John Palafoutas Senior Vice President American Electronics Association

Rhett Dawson President Information Technology Industry Council

cc: Bruce Gottlieb

Via Hand Delivery

Commissioner Robert M. McDowell Federal Communications Commission 445 12th Street, SW Room 8-C302 Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Commissioner McDowell:

We ask that you complete your proceeding to permit unlicensed fixed and portable use of the vacant channels in the television band known as the "TV white spaces" by October 2007 in accordance with the timeline you established in your September 2006 Public Notice. Properly regulated unlicensed use will cause no harmful interference to incumbent licensed services. Your support will promote greater broadband connectivity and foster the development of innovative new wireless devices and technologies for *all* Americans.

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Access to the TV white spaces can facilitate more affordable and ubiquitous broadband deployment, particularly in rural areas. There remains a persistent 15 percent gap between broadband penetration rates in rural America and more densely populated cities and suburbs. Indeed, roughly 10 percent of American households lack a wireline broadband provider. The Leadership Conference on Civil Rights and other groups have documented the persistent digital divide between Americans with access to advanced telecommunications services at home. The opening of unused spectrum will create

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It also is important that the FCC ensure that incumbent licensees are protected from harmful interference. To ensure such protection, the FCC is conducting a series of tests to: (1) determine the sensitivity of current DTV receivers to interference and (2) evaluate whether portable devices using spectrum sensing technology and transmit power control technology can operate without causing harmful interference to licensees. The FCC also has a certification process which will evaluate devices before they can be sold to consumers to ensure that they comply with FCC regulations.

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The FCC can assist in delivering greater and more innovative broadband connectivity to consumers by allowing the unlicensed fixed and portable use of the white spaces. With the superior propagation characteristics of the TV white spaces, the next generation of advanced wireless devices easily will be able to move enormous amounts of data around homes, schools, offices and neighborhoods, and reach deep into rural areas to provide low-cost broadband service. Once the FCC has completed its testing, there will be no reason why the white spaces cannot become the home of yet another wireless broadband revolution.

We look forward to working with you to deliver greater wireless broadband connectivity and innovative devices to consumers across the nation and in rural and underserved areas.

Sincerely,

Craig Mundie

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Robert W. Holleyman, II President & CEO Business Software Alliance

John Palafoutas Senior Vice President American Electronics Association

Rhett Dawson President Information Technology Industry Council

cc: Angela E. Giancarlo

Via Hand Delivery

Commissioner Deborah Taylor Tate Federal Communications Commission 445 12th Street, SW Room 8-A204 Washington, DC 20554

Re: TV White Spaces Proceeding, ET Docket Nos. 04-186, 02-380

Dear Commissioner Tate:

We ask that you complete your proceeding to permit unlicensed fixed and portable use of the vacant channels in the television band known as the "TV white spaces" by October 2007 in accordance with the timeline you established in your September 2006 Public Notice. Properly regulated unlicensed use will cause no harmful interference to incumbent licensed services. Your support will promote greater broadband connectivity and foster the development of innovative new wireless devices and technologies for *all* Americans.

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cc: Aaron Goldberger